

MAY 5 1924
Medical Lib

The Public Health Journal

OFFICIAL ORGAN

Canadian Public Health Association

Vol. XV

TORONTO, APRIL, 1924

No. 4

SPECIAL ARTICLES

LA MALADIE DE LA BAIE DE ST. PAUL

THE HONOURABLE WILLIAM RENWICK RIDDELL, LL.D., F.R.H.S.

THE STORY OF THE HAMILTON HEALTH ASSOCIATION

DR. J. H. HOLBROOK

THE TEACHER AS A SCHOOL PHYSICAL INSPECTOR

DR. RUGGLES GEORGE

PROGRAMME—ONTARIO HEALTH OFFICERS' CONVENTION

\$1.00 per annum

207 YORK BLDG., TORONTO

20 cents per copy

Certificate of Public Health Nurse (C.P.H.N.)

FACULTY OF PUBLIC HEALTH
UNIVERSITY OF WESTERN
ONTARIO
LONDON, CANADA

The fifth year of the standard professional post-graduate eight months course for nurses, leading to the Certificate of Public Health Nurse (C.P.H.N.) begins Sept. 22, 1924. Scholarships available from the Victorian Order of Nurses and from the Red Cross. Apply to the

DEAN, H. W. HILL, M.D.,
D.P.H., L.M.C.C. or to the
DIRECTOR, MISS M. E.
McDERMID, R.N.

Diploma of Public Health (D.P.H.) and Doctor of Public Health (Dr.P.H.)

FACULTY OF PUBLIC HEALTH
UNIVERSITY OF WESTERN
ONTARIO
LONDON, CANADA

Standard professional post-graduate Public Health course for physicians, leading to D.P.H. at end of first year, Dr.P.H. at end of second year. Fifth year begins Sept. 22, 1924. Apply to the

DEAN, H. W. HILL, M.B., M.D.,
D.P.H., L.M.C.C.

LONDON and SCOTTISH ASSURANCE CORPORATION LIMITED

Established in Canada 1863
FOR ALL CLASSES OF LIFE ASSURANCE

Scottish Metropolitan Assurance Company Limited

For Insurances against FIRE, ACCIDENT and SICKNESS,
GUARANTEE BONDS, ELEVATOR, AUTOMOBILES,
PUBLIC and TEAMS and EMPLOYERS' LIABILITY

Head Offices for Canada

London and Scottish Building, MONTREAL

TOTAL ASSETS EXCEED \$30,000,000

Manager for Canada, ALEXR. BISSETT

BRANCHES AND AGENCIES THROUGHOUT THE DOMINION

When writing advertisers, please mention THE PUBLIC HEALTH JOURNAL.

The Public Health Journal

VOL. XV.

TORONTO, APRIL, 1924

No. 4

La Maladie de la Baie de St. Paul

BY THE HONOURABLE WILLIAM RENWICK RIDDELL, LL.D., F.R.H.S.,
ETC., TORONTO, ONTARIO, CANADA.

ON a recent visit to the Archives of Canada at Ottawa¹, my attention was called to a mass of documents concerning a curious disease which afflicted the old Province of Quebec² in the last quarter of the eighteenth century. The description given of the disease reminded me at once of that given of the earliest form of Morbus Gallicus by Fracastorius and others who had actually seen the original, and some of whom had observed its evolution. On an examination of the literature, I find that the same thought had occurred to the mind of others; but the matter has not received much attention, and it may be worth while to say something of it.

Somewhere around 1770, a disease made its appearance at Mal Baie (now called Murray Bay) in Canada, which spread rapidly and with fatal results to the other parts of Canada. So rapid was its progress and so disastrous its ravages that, as early as 1773, the attention of the Government of the Province of Quebec² was called to it. The Governor, Sir Guy Carleton (afterwards Lord Dorchester), in the spring of 1775, sent Mr. Dan, the surgeon's mate of the Seventh Regiment of Foot, down to the Bay of St. Paul, a few miles up the river from Mal Baie, to treat those afflicted with the disease, gratis. The invasion of the Province by American forces caused the recall of Mr. Dan to Quebec, where he died in the summer of 1777.

In 1776, Mr. Menzies, a mate of the Quebec Hospital, was sent down to St. Paul's Bay to bring up some of the worst cases to Quebec for examination by the medical men. On the death of Dan, Carleton appointed M. Badilard, who had been a surgeon-major in the French service, to be hospital or surgeon's mate to the Garrison of Quebec, and sent him from time to time to St. Paul's Bay and

other parts of the Province for the same purpose. When Carleton went to England, his successor, Sir Frederick Haldimand, continued the services of Badilard in the same way. Badilard had great success in his treatment of the disease, staying a week or a fortnight at a time in the remote parishes.

In 1782, when the reduction of the Hospitals at Quebec took place, Haldimand took Badilard on his staff so as to be sure of his services in the work; and the following year, 1783, the Legislative Council took action. The Council asked the Governor to procure by means of the clergy or otherwise, a list of the persons infected in the different parishes. Haldimand requested the Vicar-General to write a circular letter to the clergy. The Governor was "happy to find by their answers that the number of persons infected was by no means so great as had been represented—the poor in the parishes adjacent to Quebec have been attended and cured by my orders and care will be taken that the same attention shall be continued"—as the Governor told the Council.

Haldimand was succeeded in November, 1784, by Lieutenant-Governor Henry Hamilton. Hamilton, in April, 1785, employed Dr. James Bowman to "proceed upon a progress through the several parishes of this Government with the design of administering your advice and distributing the medicines necessary for the effectual cure of the disorder commonly known by the name of St. Paul's Bay Distemper." Bowman was promised 200 guineas in addition to expenses and charges for medicine. The Roman Catholic Bishop of Quebec, the well-known Jean Olivier Briand^a, at the instance of the Governor, sent to all his clergy the circular letter prepared by the Government stating Bowman's employment, and also another with a description of the disease and the method of cure.

Dr. Bowman, in the summer of 1785, visited most of the parishes in the Province, and found persons infected in nearly all of them. In 1786 he repeated his journey with the same result.

In 1785, he visited 5,801; in 1786, 4,606. He supplied 6,440 with medicine; of the 5,801 he reported 807 cured in 1786. The return made by the clergy corroborated the figures of those infected.

Bowman made a claim for £2,300; the account was disputed in Council. Hamilton has been succeeded by Henry Hope. Bowman was paid £500, but the Council refused to pay the balance and he died intestate, June 20, 1787, with his account unsettled. His father, Whitney Bowman, of Ireland, came to Quebec to wind up

his estate; and the proceedings in 1791 of the Council on the claim give us much of the available information as to the disease.

Tradition has it that the disease was imported into Mal Baie by a detachment of Scottish troops stationed at that place. The usual name among the habitants was le mal Anglais, the English disease; in the Province generally it was often called la Maladie de Mal Baie, or la Maladie de la Baie de St. Paul. In St. Paul, it was called la Maladie des Eboulemens; in Berthier and Sorel, le Mal de Chicot; in Boucherville, Lusta Cruo; in other places Vilain Mal, Mauvais Mal, Gros Mal, etc., and where it appeared after the coming of German troops from the Thirteen States, it was called la Maladie Allemande, the German disease.

Dr. Bowman made a report to Lord Dorchester, November 16, 1786 (Dorchester had returned the previous month to Quebec). This report was sent to England, but does not seem to be extant (at all events the Department of Archives can find no trace of it). Swediaur⁴, Ed. 1821, Vol. 2, pp. 289, 290, says that he had extracted notes from it, and there is no apparent reason to doubt his statements.

Robert Jones, a surgeon of Montreal, published there late in 1786, a pamphlet of nineteen 12 mo. pages on "The Distemper Generally Known by the Name of Molbay Disease"⁵, in which he says: "This infectious disorder which was first discovered in the Parish of Molbay below Quebec, has pervaded almost the whole Province of Quebec with such astonishing and destructive rapidity, that from the Cedars above Montreal to the place where it was first known, no situation seems exempt." He says, p. 9, "this dangerous malady . . . has by some been confounded with the venereal disease, and by others pronounced to be only a Confirmed Pox"⁶, but he believes "that they are distinct and separate diseases, differing materially from each other in their cause, mode of infection and method of cure."

In the proceedings in Council at Quebec in 1791, Dr. Badelard, speaking from much personal knowledge, said it was 'une vérole d'une espèce particulière parce qu'elle a cédé à toutes les préparations de mercure'—a pox of a particular kind, because it yielded to all the preparations of mercury. It was not contagious a thousandth of what it was said to be; and he had published a treatment in the *Quebec Gazette*, October 28, 1784 (a mercurial treatment), and had cured all who presented themselves to him.

Mr. Fisher, a surgeon who had been in the country from 1776, said that it was contagious and had the appearance of the vener-

veal disease. He was decidedly of the opinion that it was venereal, that it had been in the country for many years, and mercury taken internally was adequate to cure it. It was still (1791) prevalent in Quebec and neighborhood.

Mr. Longmore, another surgeon, on his arrival in 1783, heard that the diseases existed at St. Paul's Bay. That fall he was sent to Machiche and employed all winter by the Government, as also the next summer at Chaleur—he had never seen any disease of a particular specific contagion that he could not immediately trace to sexual connection—"a neglected venereal disease or pox has existed and spread in remote parts similar to the Sibbens' I have seen in hospitals in Scotland from remote parts of that country." If it were a confirmed pox it would require a regular course of mercurial treatment; he had been three years at the Hotel Dieu under Dr. Nooth and never during that time saw a case of Malbay disease.

Dr. Selby accompanied Dr. Bowman to the parishes of Pt. Aux Trembles, Laprairie and St. Laurent, where many were found infected; he had at the request of the Government taken charge of the infected in Montreal and had cured 94.

Dr. Sym, of Montreal, in charge since 1779 of the Hotel Dieu said that they had no cases in the hospital, as the nuns would not admit such patients, but he had seen every day "baneful consequences of this horrid disease from all parts of the district of Montreal." He recommended the "Pluvis Mercurii Cinereus" of the late Edw. Phaim as by far the most certain, convenient and efficacious preparation of mercury I ever exhibited. I have employed no other for three years."

Dr. J. Mervin Nooth, a man of some note in his day, thought that there was no peculiar disease in the Province—there was some delusion—he never saw such a disease peculiar to the country. "A variety of diseases are, however, by the inhabitants of the Province called le mal de la Baye de St. Paul, which are nothing more than the venereal disease aggravated by neglect or mismanagement or such cancerous and cutaneous affections as daily appear in other parts of the world. The itch is frequently called by the people of this country le mal de la baye de St. Paul, and many complaints equally trifling are not infrequently branded with this formidable name."

In addition to the foregoing sources of information, there are preserved in the Canadian Archives the reports of many Curés, priests of the parishes.

For example, June 9, 17855, M. St. Germain, Curé of Repentigny, says that it sometimes happens, though rarely, that an in-

fant is affected and the nurse healthy and vice versa, or a child under eighteen months affected who has no nurse. He says, too (I translate): "There exists a certain malady which has great affinity with le mal de la Baie. There are ulcers, fixed or mobile, on the arms or the articulations of the houghs (jarets) from which distills a humor, reddish and a little purulent, accompanied by severe pain in the ulcerated part; pain is sometimes felt in the reins or stomach, the person being otherwise healthy. Ce Sont, disent ils des relicats de chauffaisons dont il n'ont pas guerir depuis nombre d' années." And he asks whether those so affected should be treated by the same method as those with the actual disease—he also asks if pregnant women should be treated⁹, and if the healthy nurse should take medicine for the infected infant or the infected nurse continue to suckle the child while she is under treatment. In another letter, August 13, 1785, the same priest says that his parish being in advance of the parishes in the use of remedies against "le mal de la Baie" finds itself "the first in a position to render thanks and to make public that nothing could be better for this disease than these remedies and that no one could be better fitted to cure this epidemic and to justify your choice than Dr. James Bowman, who intelligence, zeal, discretion and disinterestedness cannot be too highly praised." When the doctor passed through, there were 14 wholly cured of this dire malady.

Jacques Panet, Curé of L'Islet, June 27, 1785, says: "No one needs the yellow pills because I have been careful to warn every sick person not to get his feet wet."

Pouget, Curé at Berthier, August 31, 1785, has received "the zinc and the hemlock" (ciguë).

B. Dubois, Curé at Besancour, September 25, 1785, says: "Your remedies have wrought miracles, the sick are well and join me in thanks."

P. H. Gagnon, Curé at la Baye St. Paul, September, 1785, speaks of the "enormous number of sick whom you have left in my care, and of those who promptly showed themselves."

J. Chauvet, Curé at Lothbiniere and Ste. Croix, writes that "all the sick are doing well and are assured of a complete recovery." Two other families found infected the Curé will himself treat.

Martel, Curé of St. Charles, September 9, 1785, notes that "that woman who had the nose full of ulcers is cured."

Demeulle, Curé at Longeuil, August 15th, 1785, finds the greatest obstacle "the use of brandy¹⁰, but how to convince those passionately fond of it that it is bad!"

Martel, Curé at Sorel and L'Isle de Pas, November 6, 1785, fears that want of care of themselves will always prevent his people being well. "The man upon whom you wanted to operate, who is at L'Isle du Pas, is in very bad shape; his nose is now impaired (entamé) and the glands very much swollen."

Other priests applaud the value of the medicines and grieve over the carelessness of their flocks.

Nicholas Cox, Lieutenant-Governor of Gaspé, says, Percie, June 11, 1785: "We have no diseases in this district but what is caused by rum." He has given the medicines sent to him by Dr. Bowman "to a Mr. Fox, who is a piece of a doctor," who will take care of them and use them as directed if they are called for.

R. McCausland, surgeon of the Eighth Regiment at Niagara, May 18, 1785, knows the disease only by report¹¹, there being none in that part of the world. The same statement is made by George Anthon, surgeon at Detroit; but James Mair, surgeon to H. M. ship *Hermione*, knows, May 28, 1785, of this "disease so very contagious in this Province."

It is now time to turn to the available description of the disease, its symptoms, etc.

Jones says, p. 8, "Beginning unattended with pain (the absence of which is sometimes continued through the whole course of the disease)¹² for some time, this goes off on swallowing any liquid which induces the patient to relieve it by drinking frequently; in about a fortnight small ulcerations are perceived on the tonsils, uvula, velum pendulum, tongue, etc., which sometimes remain superficial for many weeks, though attended with a very foetid breath and slow fever. Then follow chaps in the lips and nostrils, with a distillation of acrimonious humor from those parts; the teeth grow carious and the gums spongy, the ulcerations spread till they unite and destroy the substance of the parts affected, the fever increases, accompanied either with obstinate constipation or profuse diarrhoea; the limbs waste although the appetite continues good, often ravenous; the bones of the nose at length grow carious, the hair drops off, nodes appear on the head and skins, the lips swell violently, the stench increases till universal putrefaction ends the existence of the unfortunate sufferer." He adds the significant note: "Sometimes, though very rarely, the genital parts are affected with ulcers."

Swediaur, taking his information from Bowman, says, vol. ii., p. 286: "The first symptoms of it are little pustules on the lips, the tongue and the inside of the mouth; but rarely in the parts of gen-

eration. These pustules are of a corrosive kind, and children have almost had their tongue destroyed by them. At first they are like little aphthae filled with a whitish puriform humor, which is so virulent that it infects those who use the patient's spoon, glass or pipe, and has even been observed to be communicated by linen, clothes," etc.

Whether the virus has got into ulcers by absorption or has been spontaneously developed without any external ulcer, it shows itself by considerable swelling, or by nocturnal pains in the bones. "These pains are relieved when the ulcers appear in the inside of the mouth or on the skin; but they are frequently attended with swelling of the glands of the neck and armpits and even of the groin; which sometimes inflame and suppurate and in certain cases become hard and indolent. Some patients also feel pains in different parts that are more sensible at night or when they take violent exercise; and this happens at what may be considered the second period of the disorder."

Dr. Bowman expressly says that the inhabitants of the Bay of St. Paul grow rotten and sometimes die of this disease without the least affection in the genitals.

The occurrence of syphilis in early times without any affection of the genitals is indicated by the medical writers of the late fifteenth and early sixteenth centuries, *e.g.*, Natalis Montesaurus, who wrote in the last decade of the fifteenth century and who was himself afflicted with the disease, says nothing of the genital parts being affected, but speaks principally of the nocturnal pains in the bones. So also Pierre Pinctor, Rome, 1500, mentions the fearful nocturnal pains and pustules all over the body, but says nothing of the genital parts being affected. Macr. Anton. Coccius Sabellicus, who died of syphilis in 1506, says that the disease began with pustules all over the body, which afterward became hideous ulcers, but he says nothing of the genitals. Writers after his time generally assert that the disease was for the most part communicated by coition or lactation.

Let us see how Fracastorius describes it. In his poem, "Syphilidis sive Morbi Gallici, Libri tres," 1530, in Lib. I, vv., 325 sqq. is his first description of the disease. I pass that over and proceed to his more mature work, "De Contagionibus, etc.," published 1546 and containing his final conclusions. In Lib II., chap. IX. of this prose work in Latin, "De Syphilide morbo seu Gallico," he describes the disease carefully and exhaustively. I translate freely.

"When first this disease appeared amongst us, substantially

the following symptoms were conspicuous—in some cases it arose without any contagion whatsoever, in others and the greater number it arose from contagion—chiefly in coitus. It did not manifest itself immediately . . . later in most cases certain small ulcers (ulcuscula) arose around the genitals. Afterwards certain crustose pustules broke out in the skin, for the most part beginning at the scalp but sometimes elsewhere; these at first were small, but gradually grew to the size of an acorn cup and similar in appearance to what are in boys called achores . . . these all after a few days opened and dripped with a certain fetid mucilaginous mucus . . . then they began to corrode like phagedenic ulcers and sometimes ate not only the flesh but even the very bones. In cases in which the upper parts were attacked, foul distillations occurred, which ate sometimes the palate, sometimes the uvula (gargareon), sometimes the fauces and tonsils . . . in some cases the lips were destroyed, in some the nose, in some the eyes, in some the whole pudenda. Moreover, in most cases, certain gummosities showed themselves on the limbs, often the size of an egg, from which when opened flowed a white mucilaginous mucus. . . . In addition to the above, as though that did not amount to anything, fearful pains appeared in the arms, sometimes before, sometimes after, but generally along with the pustules—most painful at night.

"Sometimes there were pustules without pains, and vice versa, but generally there were both."

Fracastorius further says that about six years before he wrote, there set in a change in the disease, very few pustules, almost no pains, many gummosities and "what must seem strange to all, the fall of the hair made men almost ridiculous. Some being without beard, some without eyebrows, and some with a shiny pate . . . and what is worse, now in many cases, the teeth become loose and in some instances actually fall out."

The universal opinion of the early physicians that syphilis at its first incidence in Europe was communicated without coition, without contagion of any kind and simply by the air itself, is well known. Bowman and others, competent observers, are positive that the St. Paul's Bay disease could be contracted without coition, and even without immediate touch¹³.

However that may be, the disease sometimes ended in a fatal gangrene which attacked the toes. Bowman saw some instances of this, and he also tells of a young man who lost both feet, another a leg at the knee-joint; both of these survived.

All competent authorities agree that the only cure was mercury

—patience, burdock, sarsaparilla, hemlock-spruce (*sapinette de Canada*) were used but were all ineffectual.

It would seem that this disease was syphilis of the early type. Perhaps the most remarkable thing about it is that it has left no appreciable after effects upon the parts of Canada afflicted with it.

This paper will perhaps be fitly closed by the presentment of the Grand Jury at Montreal, at the sittings of the Court of King's Bench on Monday, September 2nd, 1782, and the representation made by the medical men to the Grand Jury.

City and District of
Montreal.

At His Majesty's Court of King's Bench holden in the City and for the District of Montreal, and Province of Quebec., on Monday, the 2nd day of September, 1782.

The jurors of our Lord the King for the body of the District of Montreal, present and inform His Majesty's commissioners, that there now prevaileth amongst the inhabitants of this district, a disorder of a most alarming nature and dangerous consequences to the human species, which from the information laid before the said jurors appears to be a most malignant venereal disease.

That many persons are already so deformed by the virulency of this disorder as to be, at the same time, objects of compassion and abhorrence; and whole parishes are so infected with it as to render the travelling among them, or sleeping under the roofs of these unhappy people dangerous to His Majesty's subjects, seeing that the disorder may be communicated by the breathing even of the persons infected.

That the ruin and destruction of the rising generation within the province is threatened, unless the wisdom of His Excellency the Governor-in-Chief, with His Majesty's Legislative Council, should devise means, not only to put a stop to but to eradicate this fatal disease from amongst the inhabitants, many of whom from shame, and others from want of ability to obtain necessary attendance and relief, are now languishing in the last stages of this loathsome disorder; and although there are several who have been perfectly cured of it, the number of these bears too small a proportion to those who are infected, as to be little or no hindrance to the spreading of the disease.

That the jurors aforesaid, being sensible that considerable expences must be incurred in providing proper places for the reception of persons labouring under this disorder, with medicines and

fit attendance by men of character and abilities, do present as their opinion that such expences should be borne and supported by the inhabitants of the district at large, to which the jurors aforesaid will cheerfully contribute, and give their aid and assistance.

Montreal, September, 1782.

(Signed), James McGill, Foreman.

Jt. Dixier.

Is. Portier.

——— Adhemar.

Laurence Ermatinger.

Chas. Jauquinet.

——— Dumas.

John Tilly.

John McGill.

J. Grant.

Wm. Wilson.

Alexr. Henry.

J. Bte. Guillon.

Thos. McCord.

J. Bte. Durocher.

Richard Pollard.

Endorsed:

Presentment of the Grand Jury;

Montreal, Sept., 1782;

On the Mal Bay Disorder.

At the request of the gentlemen of the Grand Jury, we whose names are underwritten, beg leave, with all humility and submission, to lay before them a disease that seems peculiar to this province, which every one must have heard of, and that's big with consequences, not only to render the people diseased and contemptible, but must, in the end, tend to destroy the human race. . . . Let it not be said that, in our time, a disease is rapidly gaining ground, not only to destroy our fellow-creatures, but to render the offspring of those infected, disordered and degenerated; and that we are now beholding the last of Canadians, remarkable for bodily make and strength. This disease to be represented, by some is called Mal-Anglais, by others Justacrué, by others the Sibbins, but more generally the disease of St. Paul's Bay.

Without entering into a confusion of names, we would wish to call it by its true name, the Pox, which will render the disease contemptible, and would awe the inhabitants, or those afflicted, to

search for a cure, or cause them to be pointed at as those infected with a disease that is infamous; and tho' not so sudden, yet as mortal in its progressive state, as the plague itself, easily communicated and dreadful in its effects.

The lips, throat and glandular parts are generally first affected with ulcerations; as the lips by nature are deprived of the true skin, by drinking from the same cup in which the minutest atom of virus remains from the diseased person, and being absorbed by the healthy one, the disease is immediately contracted. . . . A disease so easily caught, how rapidly must it extend. After some time the bones are attacked, and it's frequently seen that the spongy bones of the nose, from their nearness to the throat, are frequently broken down, and every part of the face taken away to the basis of the skull. Spectacles too shocking to human nature, and which is the consequence of the progressive state of the disease, and of the disorder neglected.

Since every connecting person in this country is liable to receive unknowingly the infection from this horrid disorder, we would think it a part of humanity in the grand jury to address His Excellency and the Council, that through their wisdom, such a general method may immediately be taken as is most likely to put a stop to this most alarming complaint.

A committee appointed of the most eminent of the faculty, together with those who understand the internal policies of the country, will by their consultations point out the most proper means to eradicate this disorder, it being general in every parish in this district.

Montreal, 5th September, 1782.

(Signed), Charles Blake, Surgeon to the
Garrison of Montreal.

Robert Sym, Surgeon.

Geo. Selby, Surgeon.

J. Bte. Jobert, Chirurgien.

To the Gentlemen of the Grand Jury at Montreal.

Endorsed:

Report of the Medical Gentlemen,
Montreal, 5th September, 1782.

NOTES.

¹I should like to call the attention of those interested in the early history of Canada to this valuable storehouse of facts of all kinds; for example, the history of inoculation, vaccination, etc., in the British Army, can almost be written from the documents there to be found.

²Several writers speak of the Province of Lower Canada, *e.g.*, Hon. Dr. Cochrane in the Transactions Lit. and Hist. Socy. of Quebec for 1841 (Vol. IV., p. 139); Dr. Herbert S. Birkett, "A Brief Account of the History of Medicine in the Province of Quebec, 1535-1838", New York, 1908, p. 17,—there was no province of Lower Canada until after the Canada Act of 1791: the Province of Quebec created by the Royal Proclamation of 1763 and enlarged by the Quebec Act of 1774, lasted until December, 1791.

³Bishop Briand had as much as any other man (with the exception of Sir Guy Carleton) with keeping Canada faithful to Britain during the American Revolution, 1776-1783.

⁴Franz X. Swediaur (1748-1824) graduated in Vienna, 1772, having already (1770) begun to make and collect observations on syphilitic or venereal complaints. He travelled over a great part of Europe in his investigations. In 1784, he published at Edinburgh the first edition of his "Practical Observations on Venereal Complaints," 1 Vol., 8 vo.: a second edition appeared in London, 1786: a third in Edinburgh, 1788 (a third surreptitiously printed at Edinburgh which appeared in 1787, he disowned, but it closely follows the second). It was translated into French by Dr. Gibelin in 1785, and soon after reprinted. In 1798, Swediaur wrote and published in French a work on Syphilis in two vols., 8 vo., Paris; a new edition appeared in 1801, another in 1809, and others later. The authoritative and final edition was issued, London, 1821, in two vols., 8 vo., translated from the seventh French edition.

The third edition was reprinted in New York, 1788, by Campbell (two copies are in the Library of the College of Physicians of Philadelphia). His French work of 1798 was translated into English by Thomas T. Hewson, of Philadelphia, in 1815, and shared with Dr. John Hunter's Treatise the favor of the profession in the United States during the early part of the last century.

My editions are the surreptitious 3rd ed. Edinburgh, 1787, and the London edition of 1821.

⁵A copy is in the Canadian Archives from which I have a photostat—through the kindness of the officials of that admirable institution.

⁶We must get into the atmosphere of these pre-Ricord times when there was not the sharp distinction between gonorrhoea and syphilis. Jones says, p. 11, "There are two species of the venereal disease, the simple gonorrhoea or clap, and the confirmed lues or pox, both contracted by coition with an infected person." He says, p. 10, "The venereal disease made its first appearance in Europe in the year 1493."

⁷"Sibbens," "Sibbens," "Sibbins," "Sivvens," an infectious skin disease formerly prevalent in some parts of Scotland, probably venereal. A case was reported as late as 1851. Swediaur thinks the Canadian disease similar to, if not identical with Sibbens, and both closely allied to Yaws.

By some, Sibbens was considered a complication of syphilis and itch. See Dunglison's Medical Dictionary, sub. voc. It will be seen that Dr. Nooth considered the St. Paul's Bay disease in some cases, just syphilis complicated with itch.

⁸The once famous Aethiops per se, gray or black oxide of mercury.

⁹Bernard Panet, Curé at Rivière Ouelle, writes to Dr. Bowman, November 26, 1785, that there is in his parish "only Gagnon's wife who is not cured—because she has become enciente: she will resume treatment after her confinement."

¹⁰So Nicholas Cox, Governor of Gaspé, see later in the text—he says Rum, the priest, brandy.

¹¹It did not spread to the English-speaking settlements at Cornwall, Kingston and the Upper Country.

¹²No other observer speaks of the absence of pain. Jones is emphatic. "The absence of pain sometimes during the whole course of the disease is astonishing, as I have seen the Velum Pendulum and Uvula entirely destroyed with nothing more of pain than a slight pricking felt by the patient. In regard to the (French) Canadians, this is a most unfortunate circumstance: regardless of danger where bodily sensation affords no monitor to alarm them, and where the dread of expense confirms their indolence, they seldom apply for

medical assistance till the disease has made such havoc that it is sometimes incurable; and even where it then admits of a cure, it too often leaves the wretched patient to languish the remainder of life under the united miseries of an injured constitution and a mutilated frame."

¹³Are we yet quite certain as to all the ways in which syphilis may be contracted?

The Story of the Hamilton Health Association

By J. H. HOLBROOK

WHEN invited to read a paper at this year's Convention of the Canadian Tuberculosis Association, the one thing that most appealed to me was the opportunity that this trip to the West would afford to become more familiar with the excellent anti-tuberculosis work that is being carried on in every Western Province. I can assure you that all the Eastern workers in the field of tuberculosis are very much interested in your various activities, including as they do, the Tranquille Sanatorium and the Rotary Clinic of Vancouver, the Provincial Sanatorium recently established near Calgary and the well known Sanatoria at Ninette and Fort Qu'Appelle. We feel that great credit is due the province of Saskatchewan for the excellent work that was done by the Royal Commission in carrying out their splendid survey of school children, and that Manitoba should be very proud of the recent work carried out by Dr. Stewart and his Staff in the investigation of intestinal tuberculosis. In addition Manitoba has to its credit a plan by which all its future medical practitioners who are trained at the Manitoba Medical College, receive a period of internship at the Provincial Sanatorium, a plan which will undoubtedly be of great benefit to her people.

I wish to add just here that we desire to express to you our deepest sympathy in the loss which you have suffered through the untimely death of one of your workers in the field of tuberculosis. I refer to Lieutenant-Colonel Wm. M. Hart who has made for himself a name that will go down in the history of this country both for his own lovable character and for his self-sacrificing devotion to his high ideals in every phase of the fight against tuberculosis. Characteristic of his whole career was his action when war broke out in enlisting and going overseas as a private soldier. While his name is most closely associated with the Saskatchewan Sanatorium at Fort Qu'Appelle and with his work for tuberculous soldiers overseas and later in Canada, yet there is no phase of the work in Canada which will not suffer through his loss.

When we come to visit the different provinces, it is very interesting to note the diversity of methods that have been worked out to meet the local conditions. There is a striking contrast between East and West, in that all the Western Provinces have established provincial Sanatoria, while in Ontario at least the plan adopted by the province has been to encourage the establishment of local Sanatoria; while still

greater variety is shown in the methods adopted for the maintenance of indigent patients and patients requiring partial assistance towards their treatment. Tuberculosis is essentially a sociological problem and it is for this reason that results are so very much dependent upon these points of organization and maintenance. What I have to say to you will therefore be considered wholly from this viewpoint, and I hope it will show you that any plan of campaign is satisfactory if it has the support of the people of the community that is being served.

I really think I should apologize to you for the subject of my paper, "The Story of the Hamilton Health Association", but in taking this subject I am simply following instructions and I can assure you though that I do not intend to eulogize our own work, but rather wish to make the title an excuse to show you how we as a local association by the adoption of methods very different to your own, have gradually adapted our work to our own peculiar conditions, and have patiently continued, until to-day the tuberculosis mortality of our city is practically only one half that which prevails throughout the province as a whole, and is much lower than the average existing in the rural section of the province. At first thought this may appear a surprising statement but rural Ontario is practically unorganized to fight tuberculosis as we in Hamilton understand this term, so it may be of some value to present to you a sociological survey of our organization, and of our plans for the future.

I wish, therefore, in commencing this description to remind you of the fact that Hamilton was the first city in Canada to accept what may be called the local Sanatorium idea; from which has gradually developed a fairly well rounded out organization which calls into action the united forces of this particular community, for the control of tuberculosis. From the mortality standpoint a slightly lower rate has been secured in Framingham where the Metropolitan Life Insurance Company has established an ideal anti-tuberculosis organization, and they have to their credit in only a few years what it has taken us 17 years to accomplish.

On the other hand our city is doing for itself from its own finances what is being done in Framingham with outside assistance for the special purpose of proving to every community that it pays to establish a scientific but practical organization to fight tuberculosis. I wish, therefore, in taking up the real subject of my paper, to emphasize the point that our work has really been an effort to gradually build up what I would like to call a "Community Conscience" with regard to tuberculosis.

In commencing the solution of any social problem it seems to me that success will be assured only by proceeding slowly from step to step, on the assumption that people must gradually learn to understand

the problem, and that as public sympathy is aroused, the conscience of the people will see to it that sufficient support is forthcoming. Previous to the commencement of this work in Hamilton in 1906 the world had been passing through a period of great scientific discoveries in medicine and in bacteriology, the point of special interest with regard to tuberculosis being that the tubercle bacillus had been discovered in 1882. One result of this discovery was the development of an exaggerated fear of the disease, and of the victims of the disease as pictured in the word, "phthisophobia," but as the fame of the European, and especially the German sanatoria spread and as the value of fresh air became better appreciated, steps were taken in 1898 to establish the National Sanatorium at Gravenhurst, it being one of the first in America.

The establishment of the Mountain Sanatorium came about from a variety of reasons. For a time Hamilton patients (and by this I mean patients receiving city aid) were sent to Gravenhurst, and at that time climate was considered so important a factor that no person considered a local institution to be practicable. The final establishment of the Sanatorium in 1906 was partly due to a desire to try out the plan of having poor consumptives sent for treatment where they would be within easy reach of their friends, but was also in very considerable part due to a failure on the part of those interested to understand a very simple principle involved in the establishment of a Sanatorium. Funds had been raised in Hamilton to be used for the capital account of the National Sanatorium, the purpose being to build a Hamilton Pavilion, but when needy patients required treatment those interested could not understand why their maintenance had to be guaranteed after such a generous donation had been made. They did not reason out the fact that capital account establishes a permanent institution and that maintenance account leaves nothing behind it, as this money is a disappearing fund spent for the food, the nursing care, and the medical care of the patient. According to their reasoning a sum donated to capital account could be twice used, and the impossibility of this is a bit of logic that still has to be learned at the outset by practically every municipality that takes up this work.

Our own experience would lead us to believe that the funds for the maintenance of patients should be assured by provincial statutes but that the funds for the establishment of the institution, or in other words for capital account, can be safely left for the Board or Association to secure whether from donations from philanthropic citizens, or from by-laws voted by the people concerned. The institution should not grow faster than the good-will of the people is developed, and the ability to secure money for capital account is in a very definite degree a vote of confidence by the public in the management of the Board in charge

of the institution, while local money invested in the permanent buildings of the institution will do much to stimulate the necessary local interest in the work of the anti-tuberculosis association. Of course where the institution is established by the province, conditions are very different, but as a general rule the more difficult it is to secure sufficient funds for maintenance account, the less willing will public spirited men be to give either money or time to the establishment of a Sanatorium. It is but natural for people to give more willingly to establish something definite than to wipe out an overdraft, and for this reason we consider that the proper policy for Ontario should be for the provincial government to stop giving to capital account so that it can give more generously to maintenance account.

Once the Sanatorium was established in Hamilton it has been very interesting to watch the growth of what I have called the "Community Conscience," with regard to tuberculosis. At first we were much concerned over the idea that early cases should not be cared for in the same institution with advanced cases, and as a result of this feeling Mr. and Mrs. Wm. Southam gave money to erect a home for incurable cases at the City Hospital. This experiment was of great value not because of its success but because of its failure, for it proved that the principle of segregating advanced cases was unsound. It was found almost impossible to convince any consumptives that they belonged to the category of the incurable, and while the plan of caring for the advanced with the early cases might at times be distressing to the early cases, yet experience showed that it was much more distressing for the incurable cases to be compelled to enter an institution at whose portal they were supposed to abandon hope of recovery.

The real proof that the policy was unsound was the fact that with a separate home for incurables it was necessary to employ two nurses to visit patients in their homes in the city, and finally the appointment of a third was considered; but when the Sanatorium took over the advanced cases the city nursing problem very soon disappeared. Advanced cases then went willingly to the Sanatorium, and while the city has grown rapidly, in fact has almost doubled, yet instead of increasing the nurses to three, it was possible to reduce the staff to a single nurse, and even to-day only one is required.

These are points that occur in passing, but in looking back the one most important step in the history of the Mountain Sanatorium was probably the result of the visit to Hamilton in 1908 of Dr. Philip of Edinburgh. At that time Dr. Philip was the most prominent tuberculosis worker in Great Britain, and while he praised us for the start we had made, and criticized us for our unkept grounds, yet the one most valuable idea that he left was this, that in his plan of organization the chest

clinic should be made to function as the centre, or as he called it, "the clearing house" for all the work of the organization. This idea appealed very strongly to Mrs. Crerar who was president of the Ladies' Auxiliary Board from its formation until her death, and as a result a house in the city was bought and fitted up as a clinic. This became the headquarters of the visiting nurse, and gradually the work increased from two clinics a week to three, and from one of the medical staff in attendance to two, until at length the quarters were hopelessly outgrown. Finally, two years ago, it was possible to persuade the Board of Health to recognize their responsibility for this work which should be a part of any programme for the prevention of disease by furnishing us with new quarters. This resulted in the establishment of an up-to-date Health Centre in Hamilton in which we are now holding three regular clinics each week and a Saturday morning clinic for school children.

Even with Dr. Philip's advice we were slow to appreciate the importance of the clinic as anything more than a place for free chest examinations, though, as time passed we gradually learned that better co-operation was secured by trying wherever possible to send to some interested person a report on each case examined. At first, reports to doctors were telephoned, but later we wrote out reports in long hand. Only with the beginning of the war did we begin to appreciate the opportunity of making the clinic a centre for consultation, for then we made many examinations for medical officers of battalions and it became necessary to secure the attendance of a stenographer so that we could prepare a definite report on every case. To-day we send a report in the great majority of cases, and patients are referred from family physicians, school nurses of both the city and county, Mothers' Allowance Boards, Patriotic Fund Board, Children's Homes, and many other charitable sources.

I have described in detail the development of the city chest clinic because this is a part of our work that we are striving continuously to improve and extend, for we have come to believe that very much of the credit for our low death rate should go to this department of our work. Of course, cures are the result of treatment, but with the necessity for doing everything possible for the returned soldiers, and with the encouragement and assistance given by the Department of Soldiers' Civil re-establishment, the department of treatment has been fairly well standardized throughout Canada, and it certainly seems to-day that recovery depends more upon an early diagnosis of the disease than upon any other single factor.

As an extension of the consultation service, members of our Staff go willingly to houses of patients, at the request of physicians, or whenever the patient is too ill to come to the clinic. Naturally we still see

for the first time many patients who have already lost their chance for recovery, but the important point is that the relative percentage of such cases is gradually decreasing from year to year. On the other hand the improvement in this respect in city patients simply serves to emphasize the relatively unfavourable condition of patients coming from rural districts, for unfortunately the percentage of incurable patients coming to us from country districts is still very high.

This condition seems most unfortunate, for country life should possess great advantages over city life from this standpoint, but it would seem that while the cities have improved their conditions for the prevention of tuberculosis, the country districts have practically stood still. It would seem, too, that country people put too much confidence in fresh air in contrast to scientific treatment, but whatever may be the cause it is very apparent that patients from rural districts all too frequently consider Sanatorium treatment only when they have become greatly alarmed about their condition, and then, too often, the chance for recovery has been lost.

The great difficulty with rural tuberculosis work has always been the scattered or sparse population which makes it so difficult to organize from a community standpoint, but with this condition in mind we are trying now to work out a scheme that will serve to demonstrate a practical county organization, and if the demonstration is a success we are very hopeful that the plan will extend from county to county until the whole province is organized on this basis.

Our plan is under way now to establish in two neighbouring counties a system of fortnightly or monthly clinics, these to be held in the villages and towns of these two counties according to some schedule that will be worked out later. This will not be done on our part as a donation free gratis to these people, for we do not believe that a community conscience can be developed by some outside agency taking all the responsibility. We do offer to conduct the clinics for six months, but at the end of that time we are appealing to the county councils to pay for the time and travelling expenses of the member of our medical staff who performs the work, and we are asking them to at once supply accommodation for the clinic, and a secretary or stenographer. We are also endeavouring to establish the principle that these are consultation clinics rather than free clinics and are therefore asking patients to bring a letter of reference from their physician, or the Medical Health Officer or school nurse, or from some social or charitable agency, the purpose being to make sure that there will be some interested party to whom the report of the case can be referred. If we fail in securing the support of the county councils we will then appeal to the public spirited organizations of the community such as the Women's Institutes

and the Daughters of the Empire, for while we do not expect failure of support, yet such a result, rather than to discourage us, will only prove that there is greater need for education than we anticipate.

In this connection I might add that the Red Cross Society and the Canadian Tuberculosis Association some time ago adopted the policy of encouraging the formation of clinics in the cities and towns of Ontario not yet organized, and each Sanatorium has been asked to send one of their staff to conduct clinics in two neighbouring towns or cities. It is surprising the delay that can arise in so simple a procedure, but at last the two cities assigned to us have taken the necessary steps to establish clinics, for St. Catharines will commence fortnightly clinics on June 1st, and Brantford will commence monthly clinics in September. Both of these cities have small sanatoria without a resident medical officer and we feel that in both cases we are only bridging over the gap until they can afford to engage a full time resident physician, for it is our idea that the cities should be taught to look after themselves and that we should devote our spare time to the strictly rural problem where outside assistance is essential.

There is one other matter that I particularly wish to refer to in order to make clear to you the visible proof of what I have termed a "community conscience" in Hamilton. First of all our entire institution with a capital account of well over half a million, has been established by local funds except for the initial grant of \$4,000 to municipal sanatoria by the Provincial Government, and for assistance to the amount of about \$55,000 which was contributed jointly by the Provincial and Dominion Governments to provide accommodation for returned soldiers. The balance of our capital account has been received in part from private citizens and local organizations, but chiefly from the proceeds of by-laws granted by the vote of the people of Hamilton. It would not be wise to try and go into detail for I merely wish to have you see that in a disease which is acquired very often through no fault of the victim, but through the failure of the community to protect the individual (and this failure of protection for the most part occurs in childhood when the responsibility of the community is greatest), the community conscience can be developed if an association of public spirited citizens can be persuaded to champion the cause of the victims of tuberculosis.

(To be continued)

The Teacher as a School Physical Inspector

By DR. RUGGLES GEORGE

IN Virginia the school teacher conducts the physical inspection of school children. Lack of funds and a desire to make health education an integral portion of the general plane of education are the reasons why the inspections are not made by either physicians or public health nurses.

Prospective teachers in normal schools are given training in the conduct of routine physical inspection, for upon such training depends the success of the scheme.

The Virginia plan for health education was thus presented by Dr. M. E. Brydon, of the Virginia State Board of Health, in an address to the International Health Education Conference in 1923:

"Being a physician, it was only natural that my original bias was toward inspections to be undertaken by physicians; but the results of our three years' experience justifies me in believing that the physical inspection of children in all the public schools is properly the work of the teacher.

"The inspection consists of weighing, measuring, looking at the teeth, and testing the vision and hearing. After inspecting the children, the teacher makes a record of this inspection for her file and sends to the parents a notice of the obvious defects which she finds, advising consultation with the family physician or dentist, as the case may require. The teacher is instructed not to make diagnoses or to prescribe treatment, but merely to report obvious departures from the normal.

"The ideal plan would be for each child to have annually a complete medical examination, given by his family physician or the medical health officer; but we appreciate the present impossibility of realizing this object. So we utilize the teacher for the discovery of defects so apparent that they may easily be recognized and advise that she personally or through the nurse, urge parents to have the defects remedied.

"During the past year about 80 per cent. of the children in the rural public schools of Virginia were inspected. The teachers weighed and measured approximately 375,000 children, looked at their teeth and inspected their vision and hearing. Without the teachers' contribution to this work, it would have been impossible to inspect this large number of children. This means that a great many of these children who are leaving our schools would never have had their defects discovered and corrected, and many more

would have been handicapped for years. This plan makes more children physically fit and secures results quicker than any other that can be worked under existing conditions. This very real advantage alone justifies our programme.

"The teacher who has had specific training for this particular phase of work can prepare the child for the annual inspection so that it will be done in a normal, natural way, without attracting undue attention to the body and its functions. She can make it a natural part of the school procedure. It is difficult to test the vision and hearing of a child who has been made nervous by the sudden appearance of strangers.

"The inspection is a personal introduction of the physical side of the child to the teacher. Teachers testify that they get a very much better understanding of the physical condition of their pupils by inspecting them themselves than they can by looking over cards recording someone else's inspection. This knowledge gained by doing makes the teacher more alert to the physical well-being of her pupils, and is the first step in carrying forward a more comprehensive health programme in the schools.

"This first-hand knowledge stimulates constant watchfulness for symptoms of disease, and has prevented epidemics and frequent sickness in many places. In this way it has increased school attendance. Knowledge of the child's handicaps has enabled the teacher to deal more intelligently with the problem of seating, regulation of light, home study and the daily programme. The teacher is with the children all the time they are in the schoolroom, and has them under daily observation. This provides innumerable opportunities to encourage the correctional work.

"There are two admitted difficulties in the way of physical inspection by the teachers. One is the suspicious attitude of the parents; the other is the unwillingness of the teacher to undertake the work. Both of these difficulties are due to misapprehension of the facts.

"It is natural that parents, like other people, will not believe that a layman can do the work of a professional; but the answer to that objection is: we do not ask a layman to do professional work. Our physical inspection is so simple that anyone intelligent enough to be a teacher will be sufficiently intelligent to make the required inspections.

"The other objection also vanishes with a comprehension of the work and its relation to the ordinary duties of the teacher. Many teachers have been distinctly unwilling to undertake this new work;

but few, if any, have remained unwilling after they have been made to understand how they can aid in the physical well-being of their pupils, and the extent to which health and strength contribute to mental progress.

"In some of the counties in Virginia, plans are already being worked out by the health authorities to provide for the inspection of children of pre-school age, and the correction of defects during the summer previous to the opening of school.

"Our fundamental proposition is that all authority over the class room should be vested in the teacher, and that to introduce a doctor or nurse as a temporary authority is subversive of that proposition and fundamentally unwise.

"We may take for granted the teacher's ability to aid in the mental, moral and spiritual instruction of children; and, in order to supply the demand for well-trained teachers who are prepared to direct the child's growth along all health lines, the State Board of Health of Virginia and the State Board of Education are co-operating in supervising courses in health and physical education in all schools in the State actively engaged in preparing teachers. They also co-operate in conducting a correspondence course in health work for teachers.

"The family physician has a definite place in our plan. No child should be permitted to engage in strenuous exercise or games if he is under weight or until he has been examined for hernia, and has had his heart and lungs tested. These medical examinations are not a part of class room routine, and they should not be made in the class room. Children to be examined should be sent to the doctor's office. Lung or heart examinations should not be made through clothing. The family physician should make these examinations and issue a certificate based on his findings.

"The nurse also has a specific place in our programme. She follows up the work of the teacher after she has assured herself of the teacher's ability to do her part. She sees that parents are impressed with the necessity for having the corrective work undertaken. This is the main work of the school nurse, and it is enough to require virtually all of her time.

"Unfortunately, many of our counties have public health nurses who can give only part of their time to the schools; but the nursing service is being rapidly extended in order to correct this weakness in our system.

"In Virginia, we have made no comparative study of the results of the inspection made by teachers, and of the inspection made by

nurses and doctors, but in Detroit, where a thorough study is being made, they report that 'the opinion of the teachers coincides very closely with the medical opinion of the physicians. In fact, the physician having the most extreme opinion, showed far greater deviation from the median of all four physicians than the teacher' (inspecting the same children). The results of this investigation in Detroit led to the conclusion that the teachers are quite capable of grading thyroid, vision, hearing, mouth breathing, tonsils, skin, anemia, teeth, palate, cervical glands, and orthopedic defects, though they cannot examine for lung and heart affections.

"After carefully reviewing the arguments for and against our plan for the physical inspection of school children from every point of view, and surveying the whole field of public health, our conclusion is that its far-reaching benefits to the children of the present generation cannot be measured. We realize that it is not perfect, but we believe results justify our claim for it that it is the most effective plan in conducting a well-rounded programme that has for its purpose—to enable the greatest number of children to reach their highest development."

A scheme, in many respects similar to the Virginia and Detroit plan, has been in operation in Saskatchewan for several years. The foundation of this scheme is in the Normal Schools. On the staff of each of the Normal Schools, there is a school nurse who has been a successful teacher, and who is thoroughly familiar with conditions in rural schools. This nurse gives to the students a regular course of instruction on the conservation of the health of school children. The students are given to understand that this is as much their responsibility as the mental training of their pupils. In addition to the work done by the teachers, the Department of Education has a staff of 15 school nurses, who go about with the School Inspectors when they are making their regular trips. The school nurse advises and helps the teacher, and inspects the physical condition of the pupils while she is at the school. All cases of deviation from the normal are referred to the family physician. Any one who examines the annual report of the School Hygiene Branch of the Department of Education will be struck with the large number of cases that have received treatment, and the small outlay that is spent on the work. This is because some 5,000 teachers in the province are working toward the all-round development of their pupils, and are taking a keen interest in it, and are held responsible for it.

No statistics have yet been published on the hygienic conditions that are effected from year to year, but it is a fact that the common drinking cup and the common towel have disappeared, that indoor caustic toilets are supplanting the old unsanitary outhouses in rural districts, that all new desks and seats are of the adjustable type, that schools are being better lighted and that they are kept cleaner. It is impossible to compile statistics of how many children are practising personal hygiene, but it is safe to say that it is on this point that the teachers are concentrating their attention. This task has been made simpler in Saskatchewan because of the widespread organization of Junior Red Cross which supplies a strong motive for the children to put into practice the facts of health which they have been taught.

Sanitary Inspectors' Association of Canada

THE PRODUCTION OF PURE MILK.

A PLEA AND A PLAN.

BY ALEX. R. WHITE, *Chief Provincial Sanitary Inspector, Ottawa.*

Read before the Annual Convention at Ottawa, Ont.

I N undertaking to give a paper at the Convention of the Sanitary Inspectors' Association, I have been somewhat at a loss for a suitable subject, and after much hard thinking I have selected "The Production of Pure Milk." My paper is intended to convey to you an appeal or plea for a better domestic milk supply, and a plan by which I think it may be secured. I have been influenced in this choice of subject by *three reasons*. First, the field is practically a virgin one, that is outside of the large cities. Second, the necessity for a better and safer supply. Third, I believe the Sanitary Inspector has a great responsibility in connection therewith, and is not fully realizing this fact.

My paper will deal largely with conditions as they are known to me in the Province of Ontario. I regret very much that I cannot speak of the situation as it may exist throughout the whole Dominion, however, I do not think conditions can be much different. It is therefore my hope that, should my paper find favor among you, at least some of the suggestions made may be carried away by you and still further developed.

The methods used in producing milk, whether for domestic consumption, butter making, or for the cheese factory, are all very much the same, regardless of locality. There is little difference between towns of 5,000 people and small cities. There is little difficulty, of course, in such large cities as Ottawa, Toronto, Hamilton and London, but the solution obtained there is not applicable to the smaller towns, by reason of the large cost of supervision. The present situation, in regard to milk, is found in too many of the towns of, say, from five to ten thousand people, and indeed many of our budding cities cry aloud for some common sense practical reform. Let me describe some of the conditions which I have found, and which may possibly have been encountered by the gentlemen present.

As a rule, activity by the Board of Health usually begins by the passing of a milk by-law. This is introduced by the Local Board, and after much haggling by the alderman and a great deal of opposition by the dairyman, it is finally passed. The inspection of all dairy barns and milk houses by the Medical Officer and his inspector then begins. The result of this examination shows plainly, that the existing barns or stables are insanitary to a high degree, and in no way could even be made to conform with the by-law just enacted. The officials arrive home very disappointed and feeling that they have a hard job on their hands. The Medical Officer, of course, is a general practitioner, and as he has, as a rule, other competing physicians practicing in the district, he feels and indeed states, he cannot be expected to come out flat-footed and be labelled a reformer. If he did, his opposition would capture much of his practice and the pittance given him in salary by the municipality could not possibly offset this loss. The burden of educating the dairyman, appeasing the wrath of the public, and of enforcing the newly born by-law falls, where I believe it should fall, on the *Sanitary Inspector*. Now comes one of the main points in my paper. *Has the Inspector fitted himself for this responsibility?* I say, generally speaking, he has not. I am sorry to admit this. I grant you, now that a by-law has been drawn and officials appointed to enforce the same, a great improvement in the quality of milk produced should be expected. Let me say, however necessary the Regulation was, an official to enforce it who knows the business of producing milk in all its branches is one hundred times more necessary. If this official cannot be popular with the dairymen for the helpful information he can give them, he is not likely to succeed. It is one thing to find the milk produced by John Jones contains much visible dirt, of which the greater portion is undoubtedly cow dung, but quite a difficult matter at times to find how this dirt gains access. Let me say, the inspector must see to it that all manure is removed from the stable and the cattle curried and rubbed down before milking. He should further impress upon the dairyman that dirty stables, poor equipment, and unclean habits tend to produce dirty milk, which when used as infant food gives rise to such diseases as diarrhoea or enteritis and other intestinal disorders which are often fatal. We who spend all our time studying Public Health advancement, should surely be in a position to smooth away and help the dairyman, who has little time for such thought, but who is in many cases fighting for an existence and finding it difficult to make ends meet.

Because of the dirty methods of production, milk sold for domestic consumption is usually not safe. Let us see what might be done to make it safe. There are many who believe, and much thought should be given to arguments used by them, that all milk should be pasteurized. I believe scientifically pasteurized milk is the ideal milk, but let us go further. How are we to bring this about? Do you know that a complete plant for the treatment of milk costs more than \$3,000.00, even for a small unit? Where, then, is the dairyman who has a herd of 20 cows, to find such a sum? He cannot do so; his business does not warrant such an expenditure. There are, of course, a great number of such plants operating throughout the country, installed by the wide-awake vendor who brings his milk from a considerable distance, often because he gets it for a few cents less per gallon. This wide-awake vendor knows that unless he does something to check the growth of the *lactic acid bacilli* his milk will be sour before he can sell it. This man, then, does not pasteurize to kill off any disease producing organisms which may be present, he is merely protecting his own pocket by reducing or arresting the growth of the *lactic acid bacilli* by heating to a temperature which he has found by experience prevents losses by souring. Then, again, how can we tell that the supposedly scientifically treated milk at the city dairy is really what it is advertised to be? There is no recording thermometer attached whose key might be in possession of the inspector, who might check this daily. It seems to me we are depending entirely on the honesty of the dairyman himself, without being able to check him up. I wonder what happens when the milk train is late and little time to spare between the arrival and the time the milk should be on your door step for breakfast. Think this over. Try also to solve the problem of why supposedly scientifically pasteurized milk delivered to you in the morning sours before supper time.

Scientific Pasteurization, without much more activity at the point of production, would only be a partial solution. The dirt introduced into the milk before reaching the vendor (whether he treats it or bottles it after straining) must be kept out. The fact that this or that producer makes a statement that he strains through six plies of cheese cloth is of little advantage. It must be remembered that of all foreign matter which may be blown into the milking pail, or which may be dislodged from the back or sides of an uncurried or unclean cow, 60 per cent. is soluble and cannot possibly be removed by any strainer.

I have one great fear in dairies where pasteurization is carried on, that there is a tendency on the part of producers, vendors and Health Officials, to depend absolutely upon the treatment making the milk safe. The method of production and inspection at the fountain head (the farm) becomes lackadaisical, and we are inclined to say to ourselves, "Well done!" However, pasteurization if prolonged for 30 minutes at a temperature of 145 degs. Fah., and the milk then cooled and held at 40 degs. Fah., guarantees the elimination of disease.

There is another machine used and sold by dairymen, but more particularly by vendors. This is called a *Clarifier*, and is advertised as being able to remove all dirt or suspended matter by centrifugal force. Some years ago my office was the scene of a demonstration by the manufacturers, and I am convinced without doubt this machine does remove a great deal of dirt and slime. There is a point, however, which came into my mind during this demonstration and which was attacked most bitterly by the manufacturers. The point is, *why is it necessary for a dairyman to use a Clarifier?* Is he not advertising the fact that his milk is *dirty* by his purchase? Surely he is! Again, do you know that if such machines were in operation by all dairymen in your district, your present method of detecting dirty milk by means of the sedimentation test would be of no avail? All milk would appear to be clean when in reality the visible matter only would be removed, while the soluble matter remained. Discourage, if possible, the use of such a machine in your town or district. Rather bend your energy on how to produce milk so clean that useless investments of some hundreds of dollars by the dairymen will be unnecessary.

It must be very disheartening to those interested in child welfare and to the welfare clinic itself, to make a survey of a town or district and find an alarming death rate among infants. These welfare workers usually make inquiries as to whether the mortality is heaviest among children who have been breast fed (nature's way), or whether by some artificial means of which there are many brands, few of which find favor, among authorities on infant feeding. It is apparently an undisputed fact that when the mother is unable to nurse her child in the way nature intended (it is very rarely such is the case, she should most certainly utilize what supply she has), then the best possible substitute is *good clean cow's milk*, so that after finding that many of the infants who have died were bottle fed, the clinic officials turn their attention to the dairies in order to ascertain the condition under which milk is produced.

A short inspection gives all the information required and the verdict is soon reached. The cows are *dirty*. The stables are primitive, and there are few milk houses. The milk is bottled in the proprietor's kitchen, which is none too clean, and, indeed, there is the odd cases in which bottles are not even used. Customers are supplied from an eight gallon can, carried in a democrat wagon, into which a pint measure is dipped liberally. After ascertaining these facts, I have no doubt the welfare officials return to the officers of the Local Board of Health, feeling that some adjustment is necessary, and I imagine are met by some such statement as this: "Dr. Jones, the Medical Officer, is a very busy man indeed, and has little time to spend on such a subject. Old Mr. Brown is appointed milk inspector under the Milk By-law which was drafted in conformity with the provisions of the Ontario Milk Act, passed in March, 1911. He should look after those matters." So we go on down to the Inspector's house to talk matters over, but the meeting is not a success. Mr. Brown has not spent his lifetime studying the production of pure milk, and there is evidently nothing for it but to leave. The clinic has made a diagnosis. When will the cure be applied?

I have thought at considerable length on the matters just read to you and have also endured many of the disappointments which I have set out. Indeed, I spent some years as a milk inspector myself. I am sorry to say, therefore, I see no possible solution without a very radical change. I am, however, about to suggest a plan, part of which I believe to be new, and part of which is now used, but to a very small extent. The plan I suggest, is to outline and simplify the duties of a milk inspector and to provide governmental assistance in a new official appointed, who shall move from place to place, carrying on a campaign of Milk Education not only to the dairyman, but also to the Local Public Health Officials. This man must not be the ordinary propagandist, who speaks at a great length and in very technical terms. He must be able to address small meetings, of course, but of much greater importance, he must be able to meet the dairyman on his own ground and be able to figure economy for the producers as well as to get better and cleaner milk for the public. Let me then suggest a plan by which I believe the inspector who has a reasonable grasp of the production of milk may carry out his duties with greater success.

With the ordinary inspection of dairy barns, as affecting the structures, I do not intend to deal. How these buildings should be constructed and kept is usually well set forth in local by-laws.

There is no business within my knowledge where it is easier to create competitive rivalry than between peoples engaged in a milk business. This rivalry will be created by the use of the sedimentation tester (that small nickle plated cylinder with its white cotton disc). To properly create public interest in the quality of milk sold, every Inspector should have a square wooden frame on a very glass front, and have a white sheet of blotting paper fixed on a very tight wooden back. The size this frame should be will depend upon the number of dairymen supplying milk and upon the number of tests to be made each year. This frame, then, which we shall call a Bulletin Board, is ruled off into the number of squares to correspond with the tests to be made. After each testing (which should consist of forcing a pint of milk through the sedimentation test, a determination of the butter fat content, together with a lactometer reading for dilution, the temperature of the bottles should also be observed), these white sterile cotton discs should be carefully removed from the tester and placed while still wet in the centre of one of the squares already referred to, and the butter fat analysis should be printed in figures immediately underneath. To get proper value from this examination, the Bulletin Board should be hung up in a conspicuous place, preferably in the lobby of the City or Town Hall, where it may readily be seen by the ratepayers. Now, underneath the Bulletin Board should be posted a statement directing attention to the same and stating by way of explanation that the amount of dirt visible on these discs has been filtered from a pint of milk and that the figures below indicate the amount of butter fat it contains. "Mr. Citizen, are you satisfied with your milk man?" Now, if you have followed me as closely as I would have you, the strategy of such a procedure should be apparent to you. It is expected that the customer whose interest has been aroused and to whom the opportunity of comparing results found upon the board has become a habit. Now, having found a means whereby he or she may judge as to whose milk is cleanest, he or she will promptly stop buying from the dirty producers and buy from the dairy which produces the *clean white discs*. Thus the dirty milk producer loses his trade and the clean, honest dairyman gains new customers. There is no surer method of producing clean milk than by free use of your sedimentation tester, combined with the proper publicity of your results. I have seen the dairymen themselves quarrelling over such a result. Rivalry between these dairymen is thus easily created and should be prized very highly by the inspector.

At this juncture, let me ask a question, are we not as Milk Inspectors, educating the consuming public to base their judgment almost wholly upon the percentage of butter fat (or cream) contained in the bottle? Is it not a fact, that the large percentage of consumers are much more interested in the question of supposedly rich milk. You may very possibly have a milk which will test $4\frac{1}{2}$ per cent. butter fat drawn from a famous herd of Jersey cattle, which may be, and often is, loaded with tubercle bacilli and polluted with dirt. Now, if you agree with me that the public is basing its judgment in the manner set forth, shall we allow matters to remain as they are? Are we doing our duty if we do so? Surely not. We who have much to do with this question have a great responsibility and a heavy task. The ideas of the public in this regard must be changed; if they can only be persuaded to demand something better, our job will be less hard. Let me again reiterate them, use your Bulletin Board and the little white missionary to its very fullest extent.

We will not go into the question of testing for preventatives such as formaldehyde, or even as to how milk may be detected which has been skimmed or to which water has been added. These and many other points which should be known to the Milk Inspector can be better understood by a demonstration, such as would be given by the official referred to hereafter. I will go this far, however, there is to my mind little technical knowledge required of a really good Milk Inspector. There are only two really important things he must know thoroughly. These he must master or seek some other employment he is better fitted for.

The two questions are the amount of dirt filtered from a pint of milk and the temperature of the milk when he finds it. These two factors would seem to control almost the entire situation, during summer weather at least. The dirt is mostly cow dung loaded with colon bacilli which grows rapidly in milk. All that is required to complete the picture is that the milk should be hauled for half a day in a blazing hot sun or left carelessly upon the door-step exposed, to produce the most dire results when used as infant food. The inspector must master the art of making his own diagnosis and to draw his conclusions for these two easily ascertained facts. He needs no laboratory result to determine whether the milk is fit for human consumption. I fear a bacteriological examination or a quantitative analysis to determine the total solids present, are not so helpful as one might think. Reasonably clean milk if kept at a high temperature, or which may have become heated during

transit to the laboratory, will give you oftentimes a result very misleading. I firmly believe your determination should be made upon the ground, or as soon after samples are taken the better. *The little white missionary* I believe to be by far the greatest single instrument to be used in our efforts to supply the public with clean milk.

There is, of course, a technical side to the production of milk. The successful inspector should know a great deal more about the subject than the few plain, open remarks which I have made, but which I hope will be of benefit. He should know something about most of the organisms to be found in milk, bovine tuberculosis, actinomycosis, milk fever, etc. He should know the meaning of the word "certified," as applied to milk. He should be familiar with pasteurization; but where are most of us to get this information? Most of you are men who have a multitude of duties; indeed, the Sanitary Inspector is a sort of emergency officer upon whom Municipal Councils load all jobs for which no other owner may be found. I have known him to be inspector of weights and measures, Truant Officer, Indigent Officer, in addition to his regular duties under the Public Health Act, so you see, he has little time for visiting places where such information may be had. He might read or study, some may say, but this is of doubtful value until a foundation has first been laid. Then what is the solution to this problem?

I believe governments would be well repaid if sufficient moneys were appropriated to pay for, say, then, officials, men who have proved themselves and who understood municipal life. These officials would spend sufficient time in each town or district to insure that the cure at least was on the way (this is to be no hurried visit). If, therefore, we adjust the situation at a few places each year the end would at least be in sight.

In conclusion, let me quote you the words of a very great man, uttered many years ago, and which I think adapt themselves admirably to the subject which we are discussing.

He said, "No sanitary improvement will be effective whatever Acts you pass, or whatever powers you confer on public officers, unless you create an intelligent interest in the public mind."

Do not depend too much upon the printed pages of your milk by-laws to educate the dairyman and the public. *That's your job*, for as this great man says, and says truly, you may have all the laws you like together with a sufficient staff of officials for their enforcement, but if you cannot kindle sufficient interest in the minds of the people and of those whom your laws are expected to govern, then you have lost.

Monthly Jottings of Sanitary Inspectors

Don't forget, Annual Convention, Fort William, September. Lay your plans now to attend. Let's make it the best yet.

We expect that all our members are busy just now with their Spring Clean-up. It is surprising what a lot of dirt and rubbish accumulates during our long winter in even the cleanest towns. Some citizens are in no hurry to clean up and need the gentle prodding of the Sanitary Inspector.

Now is the time for cleaing up the yards, streets and lanes, the provision of new metallic garbage cans and the repairing of manure bins so that when Mrs. Fly makes her appearance she will find the town swept and garnished and will be hard put to it to find a suitable place to lay her eggs. Let the good work go on.

This outside work has to be done and yet the good inspector often laments the time that is necessary to be spent in order to induce people to clean up and keep clean their yards. when he knows that there is more important work awaiting him in the way of improving conditions inside of our houses and workshops.

Winnipeg Food Inspectors found flies in a bakery in the first week of March. They were in an upper room used by the men as a dressing room. The place was warm, moist and somewhat dirty. Flies are seldom found in good bakeries even in summer. Probably it is too hot for them. The proprietor of this shop was prosecuted and afterwards cleaned up the premises. Have any of our correspondents any information as to finding of house flies in winter?

The Winnipeg Housing Commission is not going to build any houses this year. This is to be deplored. During the last three years they have built 578 houses. The additional taxes accruing to the city annually from these houses amounts to \$60,000. The scheme was sound financially. Re-payments were largely in excess of requirements. A considerable sum was saved to the borrowers by the purchase of lumber in large quantities—in fact, it is estimated that this saving amounted to \$218.00 per house. The most important feature however, of this scheme was that the houses

were thoroughly well built and are warm in winter and cool in summer. Borrowers knew they were getting a good house for their money.

A Winnipeg Inspector was recently trying to induce a Hebrew lady to make her cow stable comply with the by-laws. He told her that although she had sewer connection, concrete floor, ventilator, etc., that the stable must be provided with adequate light, and indicated the size of window required. The lady finally broke in on his explanations as follows:—"Mr. 'Spector, you crazy or something? For why you want a window in my stable, my cow she don't read?"

The members will be sorry to learn that our esteemed President is shortly to undergo a serious operation on his eyes. This will probably have taken place by the time these jottings are in print. We are certain that the good wishes of the whole membership are with our friend at this trying time. Mr. Hague is a most highly respected man and we all trust that the operation will be entirely successful.

If you have not yet sent your Annual Subscription for 1924, please help your Secretary by remitting at once.

We had a very nice letter from our old friend and a Past President, Mr. W. F. Thornley who is now in Hamilton. Mr. Thornley is Chief Inspector there and appears to have made as many friends in the East as he has in the West. We are hoping to have him with us at our Convention.



The Provincial Board of Health of Ontario

Communicable Diseases reported for the Province for the Month of March, 1924

COMPARATIVE TABLE

Diseases.	1924		1923.	
	Cases.	Deaths.	Cases.	Deaths.
Cerebro-Spinal Meningitis ..	9	7	12	10
Chancroid	1	.....	.....	.....
Chicken Pox	504	.....	x.....	.....
Diphtheria	250	25	224	29
Encephalitis Lethargica	5	4	.....	.....
Gonorrhoea	199	.....	178	.....
Influenza	44	21	.....	617
German Measles	191	1	x.....	.....
Measles	2,811	8	1,127	9
Mumps	1,578	2	x.....	.....
Septic Sore Throat	5	1	x.....	.....
Small Pox	166	28	26	.....
Syphilis	215	.....	161	.....
Tuberculosis	155	100	187	128
Typhoid	25	2	557	22
Whooping Cough	140	10	442	24
Goitre	13	3	x.....	.....

xNot reported in 1923.

SMALL-POX REPORTED FOR THE PROVINCE FOR THE MONTH OF MARCH, 1924.

Toronto 11 cases 1 death, Brantford 7 cases, Oakland 2 cases, Dunwich 1 case, Essex Border 12 cases 6 deaths, Anderson Tp. 2 cases, Malden Tp. 3 cases 1 death, Sandwich S. 9 cases 4 deaths, Maidstone 2 deaths, Amherstburg 16 cases 8 deaths, Coldchester S. 8

cases, Hay Tp. 1 case, Dysart 1 case, Dresden 1 case, Chatham 2 cases, Chatham Tp. 7 cases, Camden Tp. 1 case, Ridgetown 1 case, Keewatin 1 case, Vermillion Bay 1 case, Perth 14 cases, Carlton Place 1 case, Athens Village 6 cases, Front of Yonge 1 case, Rear of Yonge 1 case, Brockville 6 cases, London 3 cases, Windham Tp. 1 case, Blenheim 1 case, Mornington 2 cases, Wallace 1 case, Rockland 9 cases, Matilda Tp. 1 case, Chapleau 13 cases 1 death, Cochrane 15 cases 5 deaths, Galt 3 cases, Chapple 1 case.

JOHN W. S. McCULLOUGH.

Notes on Current Literature

From the Health Information Service, Canadian Red Cross Society:

Disabled Children in Toronto.

The report of a survey of physically handicapped children, by the Child Welfare Council of Toronto.

Child Life Investigations.

A report by the British Medical Research Council on the effect of maternal social conditions and nutrition upon birth-weight and birth-length. Special report series No. 81. H. M. Stationery Office. Price one shilling.

Health-in-Play Pamphlet.

This new pamphlet deals with the health programme as an essential part of play activities, and emphasizes the connection between play and the formation of health habits. Published with the approval of the Playground and Recreation Association, by the American Child Health Association, 370 Seventh Avenue, New York City. Price 25 cents.

Homemade Health Posters.

Suggested technique for poster making by children. By Z. M. Carruthers, of the American Child Health Association. "Child Health Magazine," March, 1924, page 110.

School Noonday Lunch.

Practical suggestions for arranging and serving a supplementary hot lunch at minimum trouble and cost. "The Nation's Health," February, 1924, page 97.

Health Teaching in High Schools.

The United States Bureau of Education has issued recently Health Education Bulletin No. 15 entitled "Suggestions for a Programme for Health Teaching in the High School." Copies may be obtained from the Government Printing Office, Washington, at 5 cents a copy.

The Problems of the School Nurse.

By E. W. Bears, Secretary for School Nursing, National Organization for Public Health Nursing. "The Public Health Nurse," March, 1924, page 116.

The Prevention of Diphtheria.

An investigation of the preventive use of diphtheria antitoxin. "Public Health Reports," U. S. P. H. S., February 15th, 1924, page 283.

Diabetes Mortality.

The mortality statistics of the Metropolitan Life Insurance Company show a slight reduction in the mortality from diabetes during 1923. This may be attributed to the use of insulin. "Statistical Bulletin," Metropolitan Life Insurance Co., February, 1924, page 1.

The Use of Insulin.

A lecture to physicians by Dr. H. O. Mosenthal, of the New York Post-Graduate Medical Association. "Monthly Bulletin of the Department of Health, City of New York," January, 1924, page 1.

Full-Time Health Officers.

An address presented to the American Public Health Association by Dr. J. W. S. McCullough, Chief Officer of Health of Ontario. "American Journal of Public Health," March, 1924, page 188.

Health Section of the League of Nations.

A description of the work of the Service of Epidemiological Intelligence and Public Health Statistics of the League of Nations. "Public Health Reports," U. S. P. H. S., February 29th, 1924, page 414.

News Notes

THE NATIONAL CONFERENCE OF SOCIAL WORK.

The National Conference of Social Work will be held in Toronto from June 25th to July 2nd, 1924

To this Conference will come delegates from many parts of North America to discuss social service in all its aspects.

There will be discussions and addresses by outstanding speakers on immigration, child welfare, rural conditions, public health, feeble-mindedness, delinquency, industrial conditions, and many other problems confronting workers in rural districts, towns and cities, both large and small.

The Health Division of the Conference will discuss the educational aspect of venereal disease, health habits for school children, programmes for maternal and infant care, and the promotion of periodic health examinations.

The general meetings will be addressed by leading social workers from the United States and Canada. In the special sessions Canadians will consider the special social needs of Canada.

Over 4,500 delegates attended the 1923 meetings in Washington and this year's meetings in Toronto should bring representatives from all parts of Canada.

The town of Forest, in the county of Lambton, Ontario, having been served with an order of the Provincial Board to establish a system of waterworks, and having failed to obey the order, was recently fined for this neglect by Police Magistrate Woodrow the sum of \$1,400 and costs. Since the conviction the council of the corporation has agreed to obey the order.

The high rate of infant mortality in French Canada caused the Metropolitan Life Insurance Company, in 1921, to undertake a demonstration in child welfare intended to prove that this waste of child life was needless. After a careful survey, the town of Thetford Mines, an asbestos mining centre in the Province of Quebec, was selected as the seat of the experiment. A French-speaking nurse with extensive experience in maternity centre work was placed in charge and assigned a staff of two other French-Canadian nurses and later a physician, all of whom were given special training in New York City.

As a result of the three-year experiment, the infant death rate in Thetford Mines has been reduced from 338 per 1,000 to 96.4 per 1,000.

Another gratifying outcome of the experiment has been that because of the results obtained in Thetford Mines, the Provincial Government of Quebec has appropriated \$500,000 to be used during the next five years in child welfare work in the province.

At a meeting of the Executive of the Canadian Public Health Association the following motion was passed:—

"Moved by Dr. J. G. Fitzgerald and seconded by Dr. J. J. Heagerty, that, in view of the impossibility of having the reports of the committees ready at an earlier date, the annual meeting be postponed until June, 1925, when the Dominion Council will be in session at Ottawa."

It was down in the Eastern part of Ontario, just recently, that a meeting on Social Hygiene was announced by posters late in the afternoon. The Mayor of the municipality was out of town during the day but arrived home in the evening and his keen eye glanced at the poster on a tree near the station. "What's this darned hydrogen meeting about?" he enquired immediately from a townsman who happened to be present.

It would seem from this that perhaps the subject of social hygiene should not be sprung on the public too suddenly or dramatically, else a wrong impression may be conveyed.

That interesting film on Social Hygiene, "The Gift of Life", is still being shown over the Province of Ontario and attracting large audiences. Miss Edna Moore, Social Service Nurse of the Ontario Provincial Board of Health, exhibits the film and gives a talk on the subject of Social Hygiene at each meeting. She recently visited Napanee, Kemptville, Prescott and Sydenham.

In looking over the ratio of male and female births in Ontario, before, during and after the war, it would seem that there has been no appreciable difference in this ratio. Males are still slightly in the lead. From 1909 to 1913 the proportion was 106.8 males born to every 100 females. During the war years, 1914 to 1918, it was 106.2 males to every 100 females; from 1919 to 1922 it was 106.6 males to every 100 females. The ratio thus remains pretty constant over a period of great upheaval and reaction.

Mr. H. E. Rothwell has been appointed Chemist in the Division of Industrial Hygiene, Provincial Board of Health, Ontario, as a successor to Mr. W. E. Green, who has gone to Winnipeg to the Food and Drugs Division of the Dominion Health Department.

Ontario Health Officers' Convention, Physics Building, University of Toronto

May 20th, 21st, 22nd, 1924.

DAYLIGHT SAVING TIME.

TUESDAY.

10-11 a.m.—Registration.

11—Moving Picture.

11.30—Dr. J. W. C. McCullough, Chief Officer of Health, Ontario.

11.45—Dr. J. Fenton Argue, President, Ontario Medical Association.

1 p.m.—Luncheon—Hart House—Speakers—Hon. Dr. Forbes Godfrey, Minister of Health.
Mayor Hiltz, Toronto.

2.15 p.m.—Moving Picture.

2.30—Presidential Address, Dr. T. A. Lomer, M.O.H., Ottawa.

3.00—Dr. C. J. O. Hastings, Medical Officer of Health, Toronto,
"The Care of the Mentally Subnormal."

3.30—Dr. D. Fraser, University of Toronto, "Diphtheria."

WEDNESDAY.

9.00 a.m.—Moving Picture.

9.15—Dr. C. M. Anderson, Director, Division of Laboratories, Provincial Board of Health, "What the Laboratory does for the General Practitioner."

10.00—Dr. T. J. McNally, District Officer of Health, London, Ont.

10.30—Dr. F. L. McCarroll, Espanola, Ont., "Industrial Health."

11.15—Dr. J. W. S. McCullough, Chief Officer of Health, "The County Medical Officer of Health."

11.45—Dr. Adam Wright, Emeritus Professor of Obstetrics, University of Toronto, "The Prevention of Intestinal Diseases."

2.00 p.m.—Dr. W. M. Box, Toronto, "Oral Hygiene." Discussion.

2.30—Dr. David Marine, New York City, "The Cause and Prevention of Simple Goitre."

3.15—Dr. F. Adams, Windsor, "The Smallpox Epidemic."

- 3.45—Dr. D. V. Currey, M.O.H., St. Catharines, "Venereal Diseases and Social Hygiene in Relation to Public Health."

THURSDAY.

9.00 a.m.—Moving Picture.

9.15—Dr. C. Fenwick, Provincial Board of Health, "The Recent Typhoid Epidemic in Cochrane from the Medical Aspect."

9.30—Dr. W. E. George, District Officer of Health, "The Recent Typhoid Epidemic in Cochrane from the Public Health Aspect." Discussion.

10.00—Dr. G. C. Brink, Provincial Board of Health, "A Travelling Diagnostic Clinic on Tuberculosis."

10.15—Child Hygiene.

Dr. George E. Smith, Toronto, "Breast Feeding."

Dr. A. P. Hart, Toronto, "Infections in the Pre-School Child."

Dr. W. J. Bell, Provincial Board of Health, "The Practising Physician and Child Hygiene."

Discussion.

Editorial

Two communications dealing with the Venereal Disease grant have been received from correspondents. In view of the importance of the subject under discussion both of these statements are being used as editorials this month.

THE VENEREAL DISEASES GRANT.

It is not yet known whether the Dominion Government grant to the Provinces for the control of Venereal Diseases is to stand intact during the coming year or not. Rumour has it that \$50,000 is to be cut from the grant and that next year the continuance of the grant is doubtful. The reasons given for attacking this grant are various—that the Government must economize, that the grant is unconstitutional under the British North America Act. that the provinces ought to look after health matters themselves.

The truth of the matter is that with the establishment of the Federal Department of Health Canada came to the parting of the ways in so far as health in the Dominion is concerned. In 1919 it was definitely decided that for the Dominion to co-operate in a Dominion-wide health programme is not only constitutional but good, patriotic common sense. The point at issue then, as now, was whether Canadians think that health and happiness of the people of Canada of paramount importance, and, therefore, worthy of a real, co-ordinated scheme planned for the attainment of such ends, or whether they think that a slipshod, go-as-you-please, unco-ordinated plan such as existed before is good enough. The decision then arrived at was a momentous one which was looked upon as constituting a fruition of the ambitions and ideals of thousands whose point of view had been arrived at only because they had dreamed of the day when Parliamentarians would welcome an opportunity to concentrate on definite plans for the health and welfare of the people. The decision was sound and right. The fine piece of work which has resulted by virtue of the Venereal Diseases grant alone is ample proof of that. And now it seems that this grant is in danger and by virtue of that danger the whole principle to which the Federal Department of Health owes its being.

The British North America Act does not place the responsibility for health matters on the provinces as a casual reading of the Act will convince any observer. To urge economy as a reason for cut-

ting the Venereal Diseases grant is absurd. It is false economy for us to follow any policy which means more inmates in our asylums and hospitals and a high death rate and true economy to adhere to a policy which will further the ends of health. To shoulder responsibility unto the provinces is simply to evade the issue.

The medical profession, organized public health workers, labour and women in particular have urged the establishment of a Federal Department of Health for years. One wonders whether they realize that although a Federal Department has come into existence, its foundations are being undermined at the present moment, that the principle of Dominion leadership is under fire and that in the absence of vigorous protests not only will the Venereal Disease expenditures be curtailed with disastrous results, but that the influence and prestige of the Dominion Department of Health itself will be materially damaged.

The portfolio of health should be either a very important one or nothing. The main purpose of its foundation and existence should be leadership in the health activities in the entire Dominion. If the Government of the day proposes to cut its budget by twenty-five per cent. (an elimination of the Venereal Diseases grant means that) to break down where previously they built and to abandon a policy of infinite possibilities for no policy at all, it is not only a matter for regret but for action.

The pity of it is that such a policy or lack of policy might easily eventuate because the situation has not been thoroughly canvassed and because the organizations interested in the encouragement of constructive activities in Canada have themselves not studied the situation and have, therefore, neglected to make the proper representations. For such organizations, men and women, the handwriting is on the wall and the time to act is now.

A definite health programme designed to prevent disease, to conserve health and to prolong life throughout Canada is possible. To develop such a programme would be an achievement worthy of any Government. It would require leadership at Ottawa, co-ordination of the provinces and of voluntary organizations and the enthusiasm of citizens generally and it should come as the result of educated, public opinion.

To create such public opinion, THE PUBLIC HEALTH JOURNAL will do its part. The question is whether you, Reader, are doing yours, whether the voluntary organizations are fully informed and busy and whether public-spirited citizens are willing to realize the possibilities of organizing for health and as a result are themselves willing to act.

It is in the hope that public opinion can be aroused and that the people generally will urge the Government to extend rather than curtail in a field which means so much to the welfare of the Dominion and in which the Dominion has already taken first steps that this editorial has been written.

SOME CONSIDERATIONS ON VENEREAL DISEASES

In view of the suggested reduction of the grant by the Dominion of Canada for the purpose of combatting Venereal Diseases, a few suggestions may be appropriate.

We all know the strong feeling of indignation which Canadians and the civilized world generally have against the Germans, arising from their attempt to obtain the mastership of the world. Canada, with other civilized nations, strained her resources, material, financial and human, to the utmost to meet this world peril and to retain her liberty. She placed under arms 600,000 young Canadians, and of these some 60,000 made the supreme sacrifice of their lives on behalf of Canadian freedom and democracy. This terrible sacrifice Canada feels every day and every hour; she feels it in every walk of life, in every part of business—there is not a single interest which does not feel the loss occasioned by this drainage of her manpower.

All this is commonplace and generally known; but there is something of tremendous importance which is not known to everyone, although it should be.

The discoveries of two German doctors to identify and to cure Syphilis are of as great significance to Canada as was the war forced on her by the German Government. If the discoveries of these two German doctors were faithfully and universally applied, the loss of manpower occasioned by German armies would be recouped within a very few years, certainly far within ten years; and they would not require one one-hundredth part of the expense incurred by Canada in the war.

If this thought were constantly borne in mind, is it conceivable that every means should not be used to apply these discoveries and thereby reinstate our manhood?

Over 28,000 new cases of Venereal Diseases were reported in Canada in 1923; it is probable that three times that number of cases occurred, because it is common knowledge that all medical

men do not report these diseases in every case. The proper treatment of these 28,000 cases alone would make an appreciable increase in the manpower of the Dominion.

Suppose instead of 28,000 human beings attacked by disease it had been the case of 28,000 pigs which had been so attacked, would not the whole Dominion be alarmed and would it not insist that every means should be taken to combat the disease which so attacked our pigs, part of our material resources? Are human beings not of greater value than pigs?

There is another matter which is worthy of consideration. The Dominion of Canada is straining every effort to bring in immigrants. All proper means of stimulating immigration are being employed and at a great expense: no pains are considered too great to cause the influx of immigrants into Canada. But these immigrants are carefully examined for disease; and when found to be suffering with contagious disease, they are ruthlessly excluded from the country.

But that is immigration by way of steamship; there is another immigration of as great and even greater importance—immigration by way of the cradle.

Without detracting in the least from the value of immigrants who come to our shores from across the seas or from across the International Boundary, there is no Canadian who is of more value to Canada than the Canadian born, the Canadian from the beginning. Should it not be the part of the Government of Canada to take as great pains in respect to the health of the immigrant by way of the cradle as of the immigrant by way of the steamship? Every baby born is entitled to clean ancestry and to a clean body at birth. Is it not the duty of the Dominion to see to it that the baby is not defrauded of its just dues?

Can any call for economy deafen the ears of those responsible for the administration of public funds to the imperative demand for clean cradle immigration?

The work for purifying Canada of Venereal Diseases has been well begun. If properly encouraged, it will continue with the result that hundreds of thousands of human beings will be bettered and Canada will be made more populous and more wealthy. Assuredly this is a work which calls for the earnest attention of everyone.

